

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Lowerline - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VI

**Subject:** POLREP #3  
Excavation complete  
Lowerline  
A6SK  
New Orleans, LA  
Latitude: 29.9610719 Longitude: -90.1103340

**To:** Ronnie Crossland, EPA R6

**From:** Greg Fife, OSC

**Date:** 7/3/2019

**Reporting Period:** 6/28/2019-7/3-2019

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A6SK	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	5/17/2019
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	5/28/2019	<b>Start Date:</b>	4/30/2019
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

#### 1.1.2 Site Description

The Lowerline Site is a street in a residential area in the City of New Orleans (City). As recently as 2017, the Department of Energy (DOE) performed radiological sweeps of the area and identified a hot spot on Lowerline Street. Further investigation by Louisiana Department of Environmental Quality (LDEQ) better defined the hot spot as containing radium-226 (Ra-226). Activity measured at the surface indicated a potential source of 1 to 10 milli-Curies (mCi). At the time, the source was believed to be a discrete sealed source. The City worked with LDEQ and hired a contractor to excavate and remove the source.

The contractor excavated 36" x 36" laterally and 30" deep. The excavation did not reveal a sealed source but found contaminated soil below the original pavement level in the street. The contractor isolated, containerized, and shielded the contaminated soil in a drum. A subsequent radiation walking survey found five additional areas of subsurface contamination, which can be consolidated into three areas for reasonable excavation work. The consolidated areas are 5'x5', 10'x20' and 20'x40'. The survey extended the block and the intersecting street until the readings were not elevated. The contractor also surveyed the adjacent properties and did not find any contamination beyond the street.

##### 1.1.2.1 Location

The Site is located on the 3400 block of Lowerline Street, near the intersection of Coolidge Court and bounded by Olive Street and Edinburgh Street. The area is known as Gert Town. It is mostly residential with supporting businesses. The block where the Site is located has several vacant lots and possibly abandoned homes. Xavier University is just two blocks away.

##### 1.1.2.2 Description of Threat

The primary hazardous substance of concern at the Site is the radionuclide radium-226. Ra-226 has been found below the surface in the roadbed. It is mixed or adhering to the soils and shell road base. The pattern of contamination seems to indicate that the dispersion for the Ra-226 was during the initial construction of the road. A grader's blade or tire may have been the mechanical device to spread the Ra-226. Historical records show that the road was initially built in the 1940s or early 1950s. There is no record of the source or the base material or shells used in the construction. There is speculation that the source of the RA-226 could be a damaged sealed source that was dropped or lost on the road as it was built. Other speculation is that it was from the source of the road base or the shells and brought to the road.

Radium-226 is a radionuclide and a hazardous substance according to section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The excavation conducted by the City's contractor found the contaminated soil below two levels of pavement and a seashell road base. Historical records suggest that Lowerline Street was constructed in the 1940s or early 1950s. The Ra-226 was not found in the top 14 inches. The concentration mixed in and below the seashell road was high in Ra-226. Samples showed more than 24,000 pico-Curies per gram (pCi/g), EPA's established cleanup level is 5 pCi/g for this situation.

The survey showed elevated activity above the roadway surface several times above the background and above the action level. During a post excavation gamma survey, the City's contractor detected the activity at 1.5 mR/hr. The background for the area is 0.005 mR/hr (5 microR/hour ( $\mu$ R/hr)). EPA considers an area to be an elevated radiation risk at two times the background or 0.010 mR/hr.

During the excavation, the contractor detected 10,000 mR/hr near the hole as the contamination was reached.

The contractor's survey included the side of the street and part of the adjacent residential yards. The survey did not find any elevated readings in those areas. The contractor surveyed the length of Lowerline St between Olive and Edinburgh Streets and it appears to be beyond the area of contamination.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

#### 2.1.2 Response Actions to Date

The excavation of the contaminated areas is complete. Drawings of the excavation will follow with the report from the START contractor. With some adjustments, the excavation areas were basically the areas identified by the City's survey.

Approximately 50 cubic yards of pavement, roadbase, and soil was excavated and placed in 5 boxes and readied for shipment. The Secur intermodal boxes are used for the transportation. Each box was surveyed to insure compliance with DOT regulations so that they can be safely transported on the road. Radiologic scans were also done to characterize the waste. This entails the surveys on all sides and top, at defined distances. This allows the curie content to be calculated to determine the disposal options and locations.

Samples of the material were also taken for other laboratory analysis for RCRA hazardous characteristics.

EPA's Radiological Center from Las Vegas will mobilize to conduct surveys in the surrounding areas as well as verification at the Site. They will use rad buggies and their Scanner Van to cover the areas. If any radiation is found in the surrounding area, it will be addressed.

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

#### 2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

Excavation and removal of contaminated soil. Replacement of road.

#### 2.2.1.1 Planned Response Activities

Delivery of shipping containers (rolloffs, lock-tites, b-25s, as appropriate)  
Initiate excavation and separation of radiation wastes.  
Sample for analysis for RCRA constituents and contamination concentrations.  
Profile and acceptance at disposal facilities.  
Transportation of waste for disposal.

#### 2.2.1.2 Next Steps

Community Relations.

#### 2.2.2 Issues

## 2.3 Logistics Section

No information available at this time.

## 2.4 Finance Section

No information available at this time.

**2.5 Other Command Staff**

No information available at this time.

**3. Participating Entities**

No information available at this time.

**4. Personnel On Site**

No information available at this time.

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

No information available at this time.

**7. Situational Reference Materials**

No information available at this time.